

ABSTRACT

A 4-state bar code printing and reading system for use
in physical distribution-related services such as mail pieces,
receptacles, reception and management forms or the like, and a
5 method for controlling the system are disclosed. The 4-state
bar code printing system comprises a bar code information
acquiring section for acquiring, storing and determining a
mail piece sorting information; an information recorded
density enhancing section for evaluating a value of a
10 character, by using of a compression method depending upon a
type of the information and digit, which are determined by the
bar code information acquiring section; an input information
encoding section for arranging the values of the bars produced
by the information recorded density enhancing section in order
15 of values of bars of the 4-state bar code, and dividing the
values into groups each consisting of 3 bars; an error
correcting codeword producing section for producing an error
correcting codeword based on the result of the information
encoding section the input value of an error correcting level;
20 and a print frame producing section for arranging the error
correcting codeword produced from the error correcting
codeword producing section and the data produced from the
information recorded density improving section in order of a
start bar, a data, an error correcting codeword, and a stop
25 bar, to print a 4-state bar code print font on a mail piece.